

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1 - 31 and 33 - 47 without prejudice or disclaimer of the subject matter contained therein.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 48 (Canceled)

49. (New) A filter retrieval device, comprising:

a catheter including an elongate tube having a proximal end and a distal end and a housing disposed at the distal end, the housing having a distal end;

a guidewire extending at least in part through the catheter, the guidewire having a proximal end and a distal end;

a filter connected to the guidewire proximate the distal end of the guidewire, the filter is moveable from a position outside the housing to a position at least in part inside the housing; and

a centering catheter disposed within the housing and extending distally therefrom when the filter is in the position outside the housing.

50. (New) The filter retrieval device in accordance with claim 49, wherein the centering catheter tapers distally.

51. (New) The filter retrieval device in accordance with claim 49, wherein the centering catheter is releasably engaged to the distal end of the housing.

52. (New) A filter retrieval device, comprising:

a catheter including an elongate tube having a proximal end and a distal end;

a housing disposed at the distal end of the elongate tube;

a guidewire extending at least in part through the catheter, the guidewire having a proximal end and a distal end;
a filter disposed at the distal end of the guidewire; and
a centering catheter disposed within the housing, the centering catheter having a distally disposed soft, flexible tip.

53. (New) The filter retrieval device in accordance with claim 52, wherein the centering catheter tapers distally.

54. (New) The filter retrieval device in accordance with claim 52, wherein the centering catheter is releasably engaged to the distal end of the housing.

55. (New) The filter retrieval device in accordance with claim 52, wherein the centering catheter includes a balloon.

56. (New) The filter retrieval device in accordance with claim 52, wherein the guidewire extends distally of the filter.

57. (New) The filter retrieval device in accordance with claim 56, further comprising a spring tip at the distal end of the guidewire.

58. (New) The filter retrieval device in accordance with claim 52, wherein the filter includes an expandable frame and a filter membrane.

59. (New) The filter retrieval device in accordance with claim 58, wherein the frame includes a NiTi alloy.

60. (New) The filter retrieval device in accordance with claim 58, wherein the filter membrane surrounds a portion of the guidewire.

61. (New) The filter retrieval device in accordance with claim 58, wherein the filter

membrane portion of the filter tapers distally.

62. (New) The filter retrieval device in accordance with claim 58, wherein the filter membrane includes polyurethane.

63. (New) The filter retrieval device in accordance with claim 58, wherein the filter membrane defines a plurality of apertures.

64. (New) The filter retrieval device in accordance with claim 52, wherein the soft, flexible tip includes a proximal end and a distal end.

65. (New) The filter retrieval device in accordance with claim 64, wherein the proximal end of the soft, flexible tip includes an engagement ledge.

66. (New) The filter retrieval device in accordance with claim 64, wherein the distal end of the soft, flexible tip is tapered.

67. (New) A filter retrieval device, comprising:
a catheter including an elongate tube having a proximal end and a distal end;
a housing disposed at the distal end of the elongate tube;
a guidewire extending at least in part through the catheter, the guidewire having a proximal end and a distal end;
a filter disposed at the distal end of the guidewire, the filter includes an expandable frame and a filter membrane; and
a centering catheter disposed within the housing, the centering catheter having a distally disposed soft, flexible tip wherein the proximal end of the soft, flexible tip includes an engagement ledge and the distal end of the soft, flexible tip is tapered.

68. (New) The filter retrieval device in accordance with claim 67, wherein the centering catheter tapers distally.

69. (New) The filter retrieval device in accordance with claim 67, wherein the centering catheter is releasably engaged to the distal end of the housing.
70. (New) The filter retrieval device in accordance with claim 67, wherein the centering catheter includes a balloon.
71. (New) The filter retrieval device in accordance with claim 67, wherein the guidewire extends distally of the filter.
72. (New) The filter retrieval device in accordance with claim 71, further comprising a spring tip at the distal end of the guidewire.
73. (New) The filter retrieval device in accordance with claim 67, wherein the frame includes a NiTi alloy.
74. (New) The filter retrieval device in accordance with claim 67, wherein the filter membrane surrounds a portion of the guidewire.
75. (New) The filter retrieval device in accordance with claim 67, wherein the filter membrane portion of the filter tapers distally.
76. (New) The filter retrieval device in accordance with claim 67, wherein the filter membrane includes polyurethane.
77. (New) The filter retrieval device in accordance with claim 67, wherein the filter membrane defines a plurality of apertures.